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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,619	10/04/2001	Robert Huber	2000 P 7978 US 01	2682

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Siemens Corporation  
Intellectual Property Department  
186 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
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KANG, INSUN

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/970,619	<b>Applicant(s)</b> HUBER, ROBERT	
	<b>Examiner</b> Insun Kang	<b>Art Unit</b> 2124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/26/03, 3/18/02, 3/15/02, 10/4/01.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 24-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/26/03</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responding to application papers dated 6/26/03, 3/18/02, 3/15/02, and 10/4/01.

### ***Election/Restrictions***

2. Applicant's election without traverse of claims 1-23 in response to the examiner's restriction request via a telephone on 9/22/2004 is acknowledged (Attorney: Frank Nuzzi).
3. Claims 24-28 have been cancelled as part of Restriction practice. Claims 1-23 are pending in the application.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
5. Claims 4, 17, and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the version identifier" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the step of designating a revised version designator" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 1 does not recite the step of designing... designator.

Per claim 4, it is unclear as to which revised version designator it is referring in line 2. It is interpreted as "the revised version designator."

Claim 17 recites the limitation "the lower-level subset" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 16 recites "a plurality of lower-level subsets." Therefore, it is unclear as to which lower-level subset it is referring.

Claim 22 recites the limitation "the version indicator" in line 21. There is insufficient antecedent basis for this limitation in the claim. Previously, the term "version designator" is used.

As per claim 23, this claim is rejected for dependency on the above rejected parent claim 22.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 12-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 12-15, 16-21, and 22-23 are non-statutory because they are directed to a "computer data structure," "method," and "computer-implemented method" without recitation of a computer or a computer-readable medium embodying the data structure. The claims merely recite a "computer data structure," "method," and "computer-implemented method" that are disembodied arrangements so as to be called a

"computer program" or compilation of facts, information, or data *per se*, without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer ("acts") or computer readable medium so as to enable the computer to perform the claimed step of indicating a revision, etc as recited. Thus the claims represent non-functional descriptive material that is not capable of producing a useful result, and hence represent only abstract ideas. Therefore, the claims are non-statutory.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-10 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Donohue (US Patent 6,202,207).

Per claim 1:

Donohue discloses:

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- running the program on the manufacturing system and if the program, when run on the manufacturing system, performs according to a preselected criterion, revising the version designator for the program ("An updater component ...performs a comparison between available software updates and installed software on the local computer system to identify which are relevant to the installed software, compares the available relevant updates with update criteria held on the local computer system (these update criteria are predefined...), and then automatically downloads and applies software updates which satisfy the predefined criteria," col. 5 lines 53-62) as claimed.

Per claim 2:

The rejection of claim 1 is incorporated, and further, Donohue teaches:

- the version designator comprises a version label, version identifier, and a status identifier ("software product's identifier and release number...compared ...with predefined update criteria," col. 10 lines 58-67; "the updating component may select the highest possible version or release number of the available updates which is permitted by the update criteria, if that is the update policy," col. 11 lines 38-45) as claimed.

Per claim 3:

The rejection of claim 2 is incorporated, and further, Donohue teaches:

- the version identifier comprises a top-level version identifier and a lower-level version identifier (a move from version 1.1.1 to 1.1.4," col. 12 lines 65-67) as claimed.

Per claim 4:

The rejection of claim 1 is incorporated, and further, Donohue teaches:

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-the version identifier comprises a number and the step of designating a revised version designator for the program comprises the step of incrementing the version identifier (a move from version 1.1.1 to 1.1.4," col. 12 lines 65-67) as claimed.

Per claim 5:

The rejection of claim 2 is incorporated, and further, Donohue teaches:

- the status identifier comprises a validation indicator (col. 5 lines 54-62) as claimed.

Per claim 6:

The rejection of claim 5 is incorporated, and further, Donohue teaches:

- the manufacturing system comprises at least one line, the preselected criterion comprises a check whether the program runs satisfactorily on the line, and wherein the step of designating a revised status identifier for the program comprises activating the validation indicator (col. 6 lines 1-10; col. 5 lines 54-62) as claimed.

Per claim 7:

The rejection of claim 6 is incorporated, and further, Donohue teaches:

- the validation indicator is checked as a condition to running the program on the line without manual intervention (col. 5 lines 54-67) as claimed.

Per claim 8:

The rejection of claim 2 is incorporated, and further, Donohue teaches:

- the status identifier comprises a release indicator(col. 10 lines 16-30) as claimed.

Per claim 9:

The rejection of claim 8 is incorporated, and further, Donohue teaches:

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- the manufacturing system comprises a plurality of lines, the preselected criterion comprises a determination that the program runs satisfactorily on the lines, and the release indicator identifies the program as released for use on the plurality of lines (col. 5 lines 54-62) as claimed.

Per claim 10:

The rejection of claim 8 is incorporated, and further, Donohue teaches:

-the release indicator is checked as a condition to running the program on any lines of the manufacturing system without manual intervention (col. 5 lines 54-62) as claimed.

Per claim 22:

Donohue discloses:

- identifying that a revision has been made to the program; identifying whether the program, as revised, satisfies a preselected criterion; if the program, as revised, satisfies the preselected criterion, automatically selecting a version designator according to a preselected scheme; and automatically associating the selected version indicator with the program code ("An updater component ... performs a comparison between available software updates and installed software on the local computer system to identify which are relevant to the installed software, compares the available relevant updates with update criteria held on the local computer system (these update criteria are predefined...), and then automatically downloads and applies software updates which satisfy the predefined criteria," col. 5 lines 53-62) as claimed.



10. Claims 12-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hopwood (US Patent 6,223,343).

Per claim 15:

Hopwood discloses:

-a first portion for indicating a revision to the top-level subset of a program; and a second portion for indicating a revision to any of the lower-level subsets of the program wherein either of the first and second portions comprise a numeral that is incremented to identify the revision wherein the first and second portions are positioned on either side of a decimal point ("The first development branch from a trunk revision appends 1.0 to the trunk revision number creating a revision number of 1.0.1.0. If a second line of development were started, it would have 2.0 appended to the trunk revision creating a revision number of 1.02.0...the last position of the revision number continues to increment by 1," col. 20 lines 41-67) as claimed.

Per claim 12, this claim is another version of the claimed method discussed in claim 15, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above.

Per claim 13, this claim is another version of the claimed method discussed in claim 15, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above.

Per claim 14:

The rejection of claim 12 is incorporated above and further, Hopwood further discloses:  
-a first portion for indicating a revision to the top-level subset of a program; and a second portion for indicating a revision to any of the lower-level subsets of the program wherein the first and second portions are positioned adjacent one another ("The first development branch from a trunk revision appends 1.0 to the trunk revision number creating a revision number of 1.0.1.0. If a second line of development were started, it would have 2.0 appended to the trunk revision creating a revision number of 1.02.0...the last position of the revision number continues to increment by 1," col. 20 lines 41-67) as claimed.

Per claim 16:

Hopwood discloses:  
in a first portion for indicating a revision to the top-level subset of a program, inserting a first symbol indicating that such a revision has been made; and in a second portion for indicating a revision to any of the plurality of lower-level subsets of the program, inserting a second symbol indicating that such a revision has been made ("The first development branch from a trunk revision appends 1.0 to the trunk revision number creating a revision number of 1.0.1.0. If a second line of development were started, it would have 2.0 appended to the trunk revision creating a revision number of 1.02.0...the last position of the revision number continues to increment by 1," col. 20 lines 41-67) as claimed.

Per claim 17:

The rejection of claim 16 is incorporated, and further, Hopwood teaches:

- the first portion comprises an identifier for the top-level subset, and the second portion comprises an identifier for the lower-level subset (col. 20 lines 41-67) as claimed.

Per claim 18:

The rejection of claim 16 is incorporated, and further, Hopwood teaches:

- the top-level subset comprises a main object (col. 20 lines 41-67) as claimed.

Per claim 20:

The rejection of claim 18 is incorporated, and further, Hopwood teaches:

- the lower-level subsets comprise sub-objects relative to the main object (col. 20 lines 41-67) as claimed.

11. Claims 12-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Siemens (ICs for Communications, 1/1998).

Per claim 15:

Siemens discloses:

- a first portion for indicating a revision to the top-level subset of a program; and a second portion for indicating a revision to any of the lower-level subsets of the program wherein either of the first and second portions comprise a numeral that is incremented to identify the revision wherein the first and second portions are positioned on either

side of a decimal point (V1.2, V1.3, V1.3R," page 3 paragraphs 3-4) as claimed.

Per claim 12, this claim is another version of the claimed method discussed in claim 15, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above.

Per claim 13, this claim is another version of the claimed method discussed in claim 15, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above.

Per claim 14:

The rejection of claim 12 is incorporated above and further, Siemens further discloses:

-a first portion for indicating a revision to the top-level subset of a program; and a second portion for indicating a revision to any of the lower-level subsets of the program wherein the first and second portions are positioned adjacent one another (V1.2, V1.3, V1.3R," page 3 paragraphs 3-4) as claimed.

Per claim 17:

Siemens discloses:

-in a first portion for indicating a revision to the top-level subset of a program, inserting a first symbol indicating that such a revision has been made; and in a second portion for indicating a revision to any of the plurality of lower-level subsets of the program, inserting a second symbol indicating that such a revision has been made

wherein the first portion comprises an identifier for the top-level subset, and the second portion comprises an identifier for the lower-level subset (V1.2, V1.3, V1.3R," page 3 paragraphs 3-4) as claimed.

Per claim 16, this claim is another version of the claimed method discussed in claim 17, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above.

Per claim 21:

Siemens discloses:

in a first portion for indicating a revision to the top-level subset of a program, inserting a first symbol indicating that such a revision has been made; and in a second portion for indicating a revision to any of the plurality of lower-level subsets of the program, inserting a second symbol indicating that such a revision has been made wherein the first portion comprises an identifier for the top-level subset, and the second portion comprises an identifier for the lower-level subset (V1.2, V1.3, V1.3R," page 3 paragraphs 3-4); wherein the top-level subset comprises a main object; wherein the lower-level subsets comprise sub-objects relative to the main object; wherein the main object comprises a representation of a circuit board and the sub-objects comprise representations of components to be place on the circuit board ("FALC54 family of parts," page 3) as claimed.

Per claims 18-20, these claims are another versions of the claimed method discussed in claim 21, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue (US Patent 6,202,207) as applied to claims 1-10 and 22 above, and in view of Applicant's Admitted Prior Art (hereinafter referred to as "APA") disclosed in the instant application.

Per claim 11:

The rejection of claim 1 is incorporated, and further, Donohue does not explicitly teach that the manufacturing system comprises an electronics assembly system.

However, APA teaches that an electronics assembly system was known in the art of software and hardware system, at the time applicant's invention was made, to perform a specific function by fitting a number of basic parts or subassemblies, or any combination thereof such as those disclosed in APA ("In manufacturing systems, such as those for electronics assembly, articles of manufacture and processes associated with their

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manufacture are represented by computer programs. In the manufacture of electronics assemblies, many changes may occur in the design of the assemblies and in the programs that represent them," page 1, 0003 in the background section). It would have been obvious for one having ordinary skill in the art of software and hardware system to modify Donohue's disclosed system to incorporate the teachings of APA. The modification would be obvious because one having ordinary skill in the art would be motivated to control versions of the system assemblies by Donohue's disclosed version update method as in "manufacturing systems, such as those for electronics assembly, articles of manufacture and processes associated with their manufacture" can be represented by computer programs as taught by APA (page 1, 0003 in the background section) while achieving automatic updating and maintaining interoperability (Donohue, abstract) among the assemblies.

Per claim 23, it is the system version of claim 11, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 11 above.

14. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopwood (US Patent 6,223,343) as applied to claims 12-18 and 20 above, and in view of Applicant's Admitted Prior Art (hereinafter referred to as "APA") disclosed in the instant application.

Per claim 21:

The rejection of claim 20 is incorporated, and further, Hopwood does not explicitly teach that the main object comprises a representation of a circuit board and the sub-objects comprise representations of components to be placed on the circuit board.

However, APA teaches that representing “articles of manufacture and processes associated with their manufacture,” in manufacturing systems, such as those for electronics assembly (APA, page 1, 0003 in the background section),” by computer programs was known in the art of software and hardware system, at the time applicant's invention was made, to control and perform a specific function of electronics assembly system such as those disclosed in APA (page 1, 0003 in the background section). It would have been obvious for one having ordinary skill in the art of software and hardware system to modify Hopwood's disclosed system to incorporate the teachings of APA. The modification would be obvious because one having ordinary skill in the art would be motivated to control versions of the system assemblies by Hopwood's disclosed version update method as “articles of manufacture and processes associated with their manufacture” can be represented by computer programs as taught by APA (page 1, 0003 in the background section) to “retrieve and build any revision of an application in a consistent and repeatable manner,” as taught by Hopwood.

Per claim 19, this claim is another version of the claimed method discussed in claim 21, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth the above.




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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 703-305-6465. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 703-305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IK  
9/24/2004

  
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